

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 09/889,624A
Source: IFW/6
Date Processed by STIC: 7-27-05

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 07/27/2005

PATENT APPLICATION: US/09/889,624A

TIME: 12:37:58

Input Set : A:\17541-033US1.TXT

Output Set: N:\CRF4\07272005\I889624A.raw

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4 <110> APPLICANT: Kotwal, Girish J.
5   Daly, James
7 <120> TITLE OF INVENTION: Application of a Viral Complement
8   Inhibitory Protein in the Treatment and Diagnosis of
9   Alzheimer's Disease
11 <130> FILE REFERENCE: 17541/033US1
13 <140> CURRENT APPLICATION NUMBER: 09/889,624A
14 <141> CURRENT FILING DATE: 2001-11-07
16 <150> PRIOR APPLICATION NUMBER: PCT/US00/01115
17 <151> PRIOR FILING DATE: 2000-01-19
19 <150> PRIOR APPLICATION NUMBER: 60/116,328
20 <151> PRIOR FILING DATE: 1999-01-19
22 <160> NUMBER OF SEQ ID NOS: 12
24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 263
28 <212> TYPE: PRT
29 <213> ORGANISM: Vaccinia Virus
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32   1               5               10               15
33 Val Leu Ser Cys Cys Thr Ile Pro Ser Arg Pro Ile Asn Met Lys Phe
34   20               25               30
35 Lys Asn Ser Val Glu Thr Asp Ala Asn Ala Asn Tyr Asn Ile Gly Asp
36   35               40               45
37 Thr Ile Glu Tyr Leu Cys Leu Pro Gly Tyr Arg Lys Gln Lys Met Gly
38   50               55               60
39 Pro Ile Tyr Ala Lys Cys Thr Gly Thr Gly Trp Thr Leu Phe Asn Gln
40 65               70               75               80
41 Cys Ile Lys Arg Arg Cys Pro Ser Pro Arg Asp Ile Asp Asn Gly Gln
42   85               90               95
43 Leu Asp Ile Gly Gly Val Asp Phe Gly Ser Ser Ile Thr Tyr Ser Cys
44  100              105              110
45 Asn Ser Gly Tyr His Leu Ile Gly Glu Ser Lys Ser Tyr Cys Glu Leu
46  115              120              125
47 Gly Ser Thr Gly Ser Met Val Trp Asn Pro Glu Ala Pro Ile Cys Glu
48  130              135              140
49 Ser Val Lys Cys Gln Ser Pro Pro Ser Ile Ser Asn Gly Arg His Asn
50 145              150              155              160
51 Gly Tyr Glu Asp Phe Tyr Thr Asp Gly Ser Val Val Thr Tyr Ser Cys
52  165              170              175
53 Asn Ser Gly Tyr Ser Leu Ile Gly Asn Ser Gly Val Leu Cys Ser Gly
54  180              185              190

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55 Gly Glu Trp Ser Asp Pro Pro Thr Cys Gln Ile Val Lys Cys Pro His
 56 195 200 205
 57 Pro Thr Ile Ser Asn Gly Tyr Leu Ser Ser Gly Phe Lys Arg Ser Tyr
 58 210 215 220
 59 Ser Tyr Asn Asp Asn Val Asp Phe Lys Cys Lys Tyr Gly Tyr Lys Leu
 60 225 230 235 240
 61 Ser Gly Ser Ser Ser Ser Thr Cys Ser Pro Gly Asn Thr Trp Lys Pro
 62 245 250 255
 63 Glu Leu Pro Lys Cys Val Arg
 64 260
 67 <210> SEQ ID NO: 2
 68 <211> LENGTH: 840
 69 <212> TYPE: DNA
 70 <213> ORGANISM: Vaccinia Virus

W--> 71 <400> SEQUENCE: 2

72 tttttattat ttgtacgatg tccaggataa catttttacg gataaataaa tatgaaggtg 60
 73 gagagcgtga cggttctgac attgttggga ataggatgcg ttctatcatg ctgtactatt 120
 74 ccgtcacgac ccattaatat gaaatttaag aatagtgtgg agactgatgc taatgctaata 180
 75 tacaacatag gagacactat agaatatcta tgtctacctg gatacagaaa gcaaaaaatg 240
 76 ggacctatat atgctaaatg tacagggtact ggatggacac tctttaatca atgtattaaa 300
 77 cggagatgcc catcgctcgc agatatacat aatggccaac ttgatattgg tggagtagac 360
 78 tttggctcta gtataacgta ctcttgaat agcggatatc atttgatcgg tgaatctaaa 420
 79 tcgtattgtg aattaggatc tactggatct atgggtatgga atcccgaggc acctatttgt 480
 80 gaatctgtta aatgccaatc cctccatct atatacaacg gaagacataa cggatacagag 540
 81 gatttttata ccgatgggag cgttgtaact tatagttgca atagtggata ttcgttgatt 600
 82 ggtaactctg gtgtcctgtg ttccaggagga gaatgggtccg atccaccacac gtgtcagatt 660
 83 gttaaagtgc cacatcctac aatatcaaac ggatacttgt ctacggggtt taaaagatca 720
 84 tactcataca acgacaatgt agactttaag tgcaagtacg gatataaact atctgggtcc 780
 85 tcatcatcta cttgctctcc aggaaatata tgggaagccgg aacttccaaa atgtgtacgc 840
 88 <210> SEQ ID NO: 3
 89 <211> LENGTH: 1205
 90 <212> TYPE: DNA
 91 <213> ORGANISM: Artificial Sequence

W--> 92 <220> FEATURE:

93 <223> OTHER INFORMATION: C-terminus (nucleotides 1786-3207) of amyloid
 94 precursor protein (APP)

W--> 95 <400> SEQUENCE: 3

96 taaaaaacgt ctaggccccc cgaaccacgg ggacgtgggtt ttcctttgaa aaacacgata 60
 97 ataccatgga tgcagaatc cgacatgact caggatatga agttcatcat caaaaattgg 120
 98 tgttctttgc agaagatgtg ggttcaaaca aaggtgcaat cattggactc atggtgggag 180
 99 gtgttgtcat agcgacagt atcgatcatc ccttggtgat gctgaagaag aaacagtaca 240
 100 catccattca tcatgggtgt gtggagggtt acgcgcgtgt caccacagag gagcgccacc 300
 101 tgtccaagat gcagcagaac ggctacgaaa atccaacct caagttcttt gagcagatgc 360
 102 agaactagac ccccgccaca gcagcctctg aagttggaca gcaaaaccat tgcttacta 420
 103 cccatcggtg tccatttata gaataatgtg ggaagaaaca aaccggttt atgatttact 480
 104 cattatcgcc ttttgacagc tgtgctgtaa cacaagtaga tgctgaact tgaattaatc 540
 105 cacacatcag taatgtattc tatctctctt tacattttgg tctctatact acattattaa 600
 106 tgggttttgt gtactgtaaa gaatttagct gtatcaaact agtgcataa tagattctct 660
 107 cctgattatt tatcacatag ccccttagcc agttgtatat tattctgtg gtttgtgacc 720

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108 caattaagtc ctactttaca tatgctttaa gaatcgatgg gggatgcttc atgtgaacgt 780
109 gggagttcag ctgcttctct tgcctaagta ttcctttcct gatcactatg cattttaaag 840
110 ttaaacattt ttaagtattt cagatgcttt agagagattt tttttccatg actgcatttt 900
111 actgtacaga ttgctgcttc tgctatattt gtgatatagg aattaagagg atacacacgt 960
112 ttgtttcttc gtgctgttt tatgtgcaca cattaggcat tgagacttca agcttttctt 1020
113 tttttgtcca cgtatctttg ggtctttgat aaagaaaaga atccctgttc attgtaagca 1080
114 cttttacggg gcgggtgggg aggggtgctc tgctggtcga cgatccggct gctaacaaag 1140
115 cccgaaagga agctgagttg gctgctgcca ccgctgagca ataactagca taacccttg 1200
116 gggcc 1205

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118 <210> SEQ ID NO: 4

119 <211> LENGTH: 100

120 <212> TYPE: PRT

121 <213> ORGANISM: Artificial Sequence

W--> 122 <220> FEATURE:

123 <223> OTHER INFORMATION: C-terminus (nucleotides 1786-3207) of amyloid

124 precursor protein (APP)

W--> 125 <400> SEQUENCE: 4

126 Met Asp Ala Glu Phe Arg His Asp Ser Gly Tyr Glu Val His His Gln

127 1 5 10 15

128 Lys Leu Val Phe Phe Ala Glu Asp Val Gly Ser Asn Lys Gly Ala Ile

129 20 25 30

130 Ile Gly Leu Met Val Gly Gly Val Val Ile Ala Thr Val Ile Val Ile

131 35 40 45

132 Thr Leu Val Met Leu Lys Lys Lys Gln Tyr Thr Ser Ile His His Gly

133 50 55 60

134 Val Val Glu Val Asp Ala Ala Val Thr Pro Glu Glu Arg His Leu Ser

135 65 70 75 80

136 Lys Met Gln Gln Asn Gly Tyr Glu Asn Pro Thr Tyr Lys Phe Phe Glu

137 85 90 95

138 Gln Met Gln Asn

139 100

142 <210> SEQ ID NO: 5

143 <211> LENGTH: 244

144 <212> TYPE: PRT

145 <213> ORGANISM: Vaccinia Virus, Copenhagen Strain

W--> 146 <400> SEQUENCE: 5

147 Cys Cys Thr Ile Pro Ser Arg Pro Ile Asn Met Lys Phe Lys Asn Ser

148 1 5 10 15

149 Val Glu Thr Asp Ala Asn Ala Asn Tyr Asn Ile Gly Asp Thr Ile Glu

150 20 25 30

151 Tyr Leu Cys Leu Pro Gly Tyr Arg Lys Gln Lys Met Gly Pro Ile Tyr

152 35 40 45

153 Ala Lys Cys Thr Gly Thr Gly Trp Thr Leu Phe Asn Gln Cys Ile Lys

154 50 55 60

155 Arg Arg Cys Pro Ser Pro Arg Asp Ile Asp Asn Gly Gln Leu Asp Ile

156 65 70 75 80

157 Gly Gly Val Asp Phe Gly Ser Ser Ile Thr Tyr Ser Cys Asn Ser Gly

158 85 90 95

159 Tyr His Leu Ile Gly Glu Ser Lys Ser Tyr Cys Glu Leu Gly Ser Thr

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160          100          105          110
161 Gly Ser Met Val Trp Asn Pro Glu Ala Pro Ile Cys Glu Ser Val Lys
162          115          120          125
163 Cys Gln Ser Pro Pro Ser Ile Ser Asn Gly Arg His Asn Gly Tyr Glu
164          130          135          140
165 Asp Phe Tyr Thr Asp Gly Ser Val Val Thr Tyr Ser Cys Asn Ser Gly
166 145          150          155          160
167 Tyr Ser Leu Ile Gly Asn Ser Gly Val Leu Cys Ser Gly Gly Glu Trp
168          165          170          175
169 Ser Asp Pro Pro Thr Cys Gln Ile Val Lys Cys Pro His Pro Thr Ile
170          180          185          190
171 Ser Asn Gly Tyr Leu Ser Ser Gly Phe Lys Arg Ser Tyr Ser Tyr Asn
172          195          200          205
173 Asp Asn Val Asp Phe Lys Cys Lys Tyr Gly Tyr Lys Leu Ser Gly Ser
174          210          215          220
175 Ser Ser Ser Thr Cys Ser Pro Gly Asn Thr Trp Lys Pro Glu Leu Pro
176 225          230          235          240
177 Lys Cys Val Arg
181 <210> SEQ ID NO: 6
182 <211> LENGTH: 244
183 <212> TYPE: PRT
184 <213> ORGANISM: Vaccinia Virus, Western Reserve Strain
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187 1          5          10          15
188 Val Glu Thr Asp Ala Asn Ala Asn Tyr Asn Ile Gly Asp Thr Ile Glu
189          20          25          30
190 Tyr Leu Cys Leu Pro Gly Tyr Arg Lys Gln Lys Met Gly Pro Ile Tyr
191          35          40          45
192 Ala Lys Cys Thr Gly Thr Gly Trp Thr Leu Phe Asn Gln Cys Ile Lys
193          50          55          60
194 Arg Arg Cys Pro Ser Pro Arg Asp Ile Asp Asn Gly Gln Leu Asp Ile
195 65          70          75          80
196 Gly Gly Val Asp Phe Gly Ser Ser Ile Thr Tyr Ser Cys Asn Ser Gly
197          85          90          95
198 Tyr His Leu Ile Gly Glu Ser Lys Ser Tyr Cys Glu Leu Gly Ser Thr
199          100          105          110
200 Gly Ser Met Val Trp Asn Pro Glu Ala Pro Ile Cys Glu Ser Val Lys
201          115          120          125
202 Cys Gln Ser Pro Pro Ser Ile Ser Asn Gly Arg His Asn Gly Tyr Glu
203          130          135          140
204 Asp Phe Tyr Thr Asp Gly Ser Val Val Thr Tyr Ser Cys Asn Ser Gly
205 145          150          155          160
206 Tyr Ser Leu Ile Gly Asn Ser Gly Val Leu Cys Ser Gly Gly Glu Trp
207          165          170          175
208 Ser Asp Pro Pro Thr Cys Gln Ile Val Lys Cys Pro His Pro Thr Ile
209          180          185          190
210 Ser Asn Gly Tyr Leu Ser Ser Gly Phe Lys Arg Ser Tyr Ser Tyr Asn
211          195          200          205

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Input Set : A:\17541-033US1.TXT

Output Set: N:\CRF4\07272005\I889624A.raw

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212 Asp Asn Val Asp Phe Lys Cys Lys Tyr Gly Tyr Lys Leu Ser Gly Ser
213      210      215      220
214 Ser Ser Ser Thr Cys Ser Pro Gly Asn Thr Trp Lys Pro Glu Leu Pro
215 225      230      235      240
216 Lys Cys Val Arg
220 <210> SEQ ID NO: 7
221 <211> LENGTH: 240
222 <212> TYPE: PRT
223 <213> ORGANISM: Cowpox Virus, Russian Isolate From Human Patient
W--> 224 <400> SEQUENCE: 7
225 Cys Cys Pro Ile Pro Ser Arg Pro Ile Thr Met Lys Phe Lys Gly Thr
226 1      5      10      15
227 Val Asp Ser His Tyr Asn Ile Gly Asp Thr Ile Glu Tyr Leu Cys Leu
228      20      25      30
229 Pro Gly Tyr Arg Lys Gln Lys Met Gly Pro Ile Tyr Ala Lys Cys Thr
230      35      40      45
231 Gly Thr Gly Trp Thr Leu Phe Asn Gln Cys Ile Lys Arg Arg Cys Pro
232      50      55      60
233 Ser Pro Arg Asp Ile Asp Asn Gly Gln Leu Asp Ile Gly Gly Val Asp
234 65      70      75      80
235 Phe Gly Ser Ser Ile Thr Tyr Ser Cys Asn Ser Gly Tyr His Leu Ile
236      85      90      95
237 Gly Glu Ser Lys Ser Tyr Cys Glu Leu Gly Ser Thr Gly Ser Met Val
238      100     105     110
239 Trp Asn Pro Glu Ala Pro Ile Cys Glu Ser Val Lys Cys Gln Ser Pro
240      115     120     125
241 Pro Ser Ile Ser Asn Gly Arg His Asn Gly Tyr Glu Asp Phe Tyr Thr
242      130     135     140
243 Asp Gly Ser Val Val Thr Tyr Ser Cys Asn Ser Gly Tyr Ser Leu Ile
244 145     150     155     160
245 Gly Asn Ser Gly Val Leu Cys Ser Gly Gly Glu Trp Ser Asp Pro Pro
246      165     170     175
247 Thr Cys Gln Ile Val Lys Cys Pro His Pro Thr Ile Ser Asn Gly Tyr
248      180     185     190
249 Leu Ser Ser Gly Phe Lys Arg Ser Tyr Ser Tyr Asn Asp Asn Val Asp
250      195     200     205
251 Phe Lys Cys Lys Tyr Gly Tyr Lys Leu Ser Gly Ser Ser Ser Ser Thr
252      210     215     220
253 Cys Ser Pro Gly Asn Thr Trp Gln Pro Glu Leu Pro Lys Cys Val Arg
254 225     230     235     240
257 <210> SEQ ID NO: 8
258 <211> LENGTH: 244
259 <212> TYPE: PRT
260 <213> ORGANISM: Cowpox Virus, Brighton Strain
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262 Cys Cys Thr Ile Pro Ser Arg Pro Ile Asn Met Lys Phe Lys Asn Ser
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264 Val Gly Thr Asp Ala Asn Ala Asn Tyr Asn Ile Gly Asp Thr Ile Glu
265      20      25      30

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VERIFICATION SUMMARY

DATE: 07/27/2005

PATENT APPLICATION: US/09/889,624A

TIME: 12:37:59

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Output Set: N:\CRF4\07272005\I889624A.raw

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L:95 M:283 W: Missing Blank Line separator, <400> field identifier
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